



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,511	11/05/2001	David L. Rabbers	OIC0047P1US	6817
60975	7590	05/18/2007	EXAMINER	
CSA LLP			KANG, PAUL H	
4807 SPICEWOOD SPRINGS RD.				
BLDG. 4, SUITE 201				
AUSTIN, TX 78759			ART UNIT	PAPER NUMBER
			2144	
			MAIL DATE	DELIVERY MODE
			05/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	09/992,511	RABBERS ET AL.
	Examiner	Art Unit
	Paul H. Kang	2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10 April 2007.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-6,8,9,11-16,18,19,21-26,28,29,31 and 33-40 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-6,8,9,11-16,18,19,21-26,28,29,31 and 33-40 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 05 November 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.
_____.
_____. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments and amendments filed on 30 March 2001 have been carefully considered but they are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the following new grounds of rejection as explained here below, necessitated by Applicant's substantial amendment to the claims which significantly affected the scope thereof.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,477,543 by Huang in view of Herrod et al., US Patent No. 6,996,634.**

4. In claim 1, Huang teaches about a method, comprising: establishing a connection between a server "Replica Host" and a synchronization client "Synchronization Proxy" associated with a handheld device "Client", the server having access to a first database (data store in 402) and the handheld device having access to a second database (data store in 202), the handheld device comprising an application configured to allow a user access to

Art Unit: 2144

the second database, wherein the synchronization client is configured to use the connection in an a operation to synchronize the second database and the first database (Huang Col 1, lines 50-60) (Huang Col 7, lines 25-30) (Huang Col 7, lines 45-55) (Huang Col 8, lines 1020) (Huang Co1.8, lines 55-65) (Huang Col 9, lines 29-33); receiving, from the server, first information indicative of a structure "format" of the first database (Huang Col 8, lines 2035) (Huang Col 13, lines 35-45); This information is embedded in the sync logic that is past to synchronization proxy, receiving, from the server, second information indicative of a version of the application (Huang Col 2, lines 10-20) (Huang Col 13, lines 35-45) (Huang Col 14, lines 20-30); This information is embedded in the sync logic that is past to synchronization proxy, sending, to the server, information of transactions performed on the second database (Huang Col 13, lines 50-60); receiving metadata from the server to update the application (Huang Col 13, lines 40-50); and (metadata information that convey the adjustment moving from a high resolution to a Handheld Palm Pilot screen) and determining whether the handheld device has sufficient memory to store (Huang, Col. 6, lines 29-55, Col. 10, lines 29-51 and Col. 13, lines 44-45).

However, Huang does not teach comparing the second information stored on the handheld device that is indicative of a version of the application on the handheld device, and updating the application on the handheld device using metadata received from the server if the second information does not compare equally with the information that is indicative of the version of the application on the handheld device.

In the same field of endeavor, Herrod teaches a system and method for a configurable operating system for control of a mobile device comprising comparing the second information stored on the handheld device that is indicative of a version of the application on the handheld

device, and updating the application on the handheld device using metadata received from the server if the second information does not compare equally with the information that is indicative of the version of the application on the handheld device (See Herrod, col. 7, lines 13-37 and col. 5, lines 15-54). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the application updating as taught by Herrod into the synchronization system of Huang for the purpose of increasing flexibility of device management as well as improving compatibility to data formats.

5. In claim 2, Huang-Herrod, teaches about a method of claim 1, further comprising determining whether the structure of the first database has been updated since the previous synchronization operation (Huang Col 13, lines 50-60) (Huang Col 14, lines 20-30).

6. In claim 3, Huang-Herrod, teaches about a method of claim 2; wherein determining whether the structure of the first database has been updated since the previous synchronization operation, comprises: comparing the first information with information stored on the handheld device that is indicative of the structure of the first database when the previous synchronization operation was performed (Huang Col 13, lines 50-60) (Huang Col 14, lines 20-30).

7. **Claims 3-6, 8-9, 11-16, 18-19, 21-26, 28-29, 31, and 33-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Herrod, and further in view of Boothby et al., US Patent App. No. 2001/0005849.**

8. In claim 4, Huang-Herrod teaches about method of claim 2, wherein receiving, from the server, one of the filtered data, comprises (Covered in claim 1) (Boothby Paragraph 56, lines 1-11); receiving, from the server, a first set of data extracted from the first database when the structure of the first database has been updated since the previous synchronization operation, the first set of data including data that has not changed in the second database since the previous synchronization operation was performed (Huang Col 10, lines 15-25) (Huang Col 13, lines 35-45) (Huang Col 13', lines 50-60). Steps involve when updating email from a Lotus Notes source.

But Huang-Herrod does not explicitly teach about sending to the server, filter information; filtering data based on the filter information; and receiving from the server, the filter data.

Boothby teaches about a synchronization of databases using filters in which filter information is provided to a first database (Server or desktop). The filter information is used in the filtering operation as claimed (Paragraph 19, lines 1-8) (Paragraph 22, lines 1-6) (Paragraph 44, lines 1-8). Boothby further teaches about the filter data being synchronized base on filter information that has changed since the previous synchronization operation (Paragraph 45, lines 1-8) (Paragraph 46, lines 1-6) (Paragraph 47, lines 1-13). The handheld devices in Huang invention are know in the art to be limited in process and storage capabilities (Huang Col 2, lines 5-15) (Huang Col 11, lines 35-45). Boothby disclosed in his invention an improvement to handheld computer operation by filtering data that has changed after previous synchronization (Paragraph 19, lines 1-8) (Paragraph 46, lines 1-6).

It would have been obvious for some one of ordinary skill at the time of the invention to improve on Huang invention by use the filtered-synchronized operation of Boothby invention to better utilize the limited memory of a handheld device.

9. In claim 5, Huang-Herrod-Boothby, teaches about a method of claim 2, wherein receiving, from the server; one of the filtered, comprises (Boothby Paragraph 56, lines 1-11) (Covered in claim .1): receiving, from the server, a second set of data extracted from the first database when the structure of the first database has not been updated since the previous synchronization operation, the second set of data not including data that has not changed in the second database since the previous synchronization operation was performed (Huang Col 10, lines 15-25) (Huang Col 13, lines 50-60). Steps involve when updating an address book application.
10. In claim 6. Huang-Herrod-Boothby teaches about a method of claim 1, further comprising determining whether the application has been updated since the previous synchronization operation (Huang Col 13, lines 50-60).
11. In claim 8, Huang-Herrod-Boothby teaches about a method of claim 1, wherein sending, to the server, information of transactions performed on the second database, comprises: receiving, from the server, an identifier of information of a last transaction received by the server (Huang Col 14, lines 20-30); and sending, to the server, transaction information that includes an

identifier for each transaction "update history" made after the last transaction received by the server (Huang Col 14, lines 20-30).

12. In claim 9, Huang-Herrod-Boothby teaches about a method of claim 8, wherein sending to the server information of transactions performed on the second database, further comprises: receiving, from the server, error information when the server detects a transaction error (Huang Col 14, lines 35-40); providing an indication of the error information to a user (Huang Col 14, lines 12-18); receiving input from the user to process the transaction error (Huang Col 14, lines 12), means for identifying, in the first database, data visible to the user of the synchronization client (Covered in claim 1); means for filtering the identified data based on the user-specific filter information (Covered in claim 1) and means for receiving, from the server, one of the filtered data or a subset of the filtered data that has changed since the previous synchronization operation data. (Covered in claim 1).

13. In claim 11, is substantially the same as that of claim 1 above.

14. In claim 12, Huang-Herrod-Boothby teaches about a system of claim 11, further comprising means for determining whether the structure of the first database has been updated since the previous synchronization operation (Huang Col 13, lines 50-60) (Huang Col 14, lines 20-30).

Art Unit: 2144

15. In claim 13, Huang-Herrod-Boothby teaches about a system of claim 12, wherein the means for determining, comprises: means for comparing the first information with information stored on the handheld device that is indicative of the structure of the first database when the previous synchronization operation was performed (Huang Col 13, lines 50-60) (Huang Col 14, lines 20-30).

16. In claim 14, Huang-Herrod-Boothby teaches about a method of claim 2, wherein the means for receiving, from the server, one of the filtered data or a subset of the filtered data that has changed since the previous synchronization operation to update the second database, comprises (Boothby Paragraph 56, lines 1-11) (Covered in claim 1): means for receiving, from the server, a first set of data extracted from the first database when the structure of the first database has been updated since the previous synchronization operation, the first set of data including data that has not changed in the second database since the previous synchronization operation was performed (Huang Col 10, lines 15-25) (Huang Col 13, lines 35-45) (Huang Col 13, lines 50-60). Steps involve when updating email from a Lotus Notes source.

17. In claim 15, Huang-Herrod-Boothby teaches about method of claim 2, wherein the means for receiving, from the server, one of the filtered data or a subset of the filtered data that has changed since the previous synchronization operation to update the second database, comprises (Covered in claim 1): means for receiving, from the server, a second set of data extracted from the first database when the structure of the first database has not been updated since the previous synchronization operation, the second set of data not including data

that has not changed in the second database since the previous synchronization operation was performed (Huang Col 10, lines 15-25) (Huang Col 13, lines 50-60). Steps involve when updating an address book application.

18. In claim 16, Huang-Herrod-Boothby teaches about a system of claim 11, further comprising means for determining whether the application has been updated since the previous synchronization operation (Huang Col 13, lines 50-60).

19. In claim 18, Huang-Herrod-Boothby teaches about a system of claim 11, wherein the means for sending, to the server, information of transactions performed on the second database, comprises: means for receiving, from the server, an identifier of information of a last transaction received by the server (Huang Col 14, lines 20-30); and means for sending, to the server, transaction information that includes an identifier for each transaction "update history" made after the last transaction received by the server (Huang Col 14, lines 20-30).

20. In claim 19, Huang-Herrod-Boothby teaches about a system of claim 18, wherein the means for sending to the server information of transactions performed on the second database, further comprises: means for receiving, from the server, error information when the server detects a transaction error (Huang Col 14, lines 35-45); means for providing an indication of the error information to a user (Huang Col 14, lines means for receiving input from the user to process the transaction error (Huang Col 14, lines 12-18)).

21. In claim 21, Huang-Herrod-Boothby teaches about a machine-readable medium having stored thereon a plurality of instructions that when executed by a computer cause the computer to perform operations comprising (Huang Col 126, lines 38-50): establishing a connection between a server "Replica Host" and a synchronization client "Synchronization Proxy" associated with a handheld device "Client", the server having a first database (data store in 402) and the handheld device having a second database (data store in 202), the handheld device having an application to allow a user to access the second database, wherein the synchronization client to use the connection in a synchronization operation of the second database and the first database (Huang Col 1, lines 50-60) (Huang Col 7, lines 25-30) (Huang Col 7, lines 45-55) (Huang Col 8, lines 10-20) (Huang Col 8, lines 55-65) (Huang Col 9, lines 29-33); receiving, from the server, first information indicative of a structure "format" of the first database (Huang Col 8, lines 20-35) (Huang Col 13, lines 35-45); This information is embedded in the sync logic that is past to synchronization proxy, receiving, from the server, second information indicative of a version of the application from the server (Huang Col 13, lines 35-45) (Huang Col 14, lines 20-30); This information is embedded in the sync logic that is past to synchronization proxy, sending, to the server, information of transactions performed on the second database by a user via the handheld device (Huang Col 13, lines 50-60); receiving metadata from the server to update the application on the handheld device when the application has been updated since a previous synchronization operation (Huang Col 13, lines 40-50); and (metadata information that convey the adjustment moving from a high resolution to a Handheld Palm Pilot screen). sending, to the server, filter information (Covered in claim 1); filtering data based on the filter information (Covered in claim

1); and receiving, from the server, the filtered data that has changed since the previous synchronization operation to update the second database (Covered in claim 1), and further Herrod teaches a system and method for a configurable operating system for control of a mobile device comprising comparing the second information stored on the handheld device that is indicative of a version of the application on the handheld device, and updating the application on the handheld device using metadata received from the server if the second information does not compare equally with the information that is indicative of the version of the application on the handheld device (See Herrod, col. 7, lines 13-37 and col. 5, lines 15-54).

22. In claim 22, Huang-Herrod-Boothby teaches about a machine-readable medium of claim 22, wherein the instructions for performing the operation of receiving, from the server, one of the filtered data or a subset, of the filtered data that has changed since the previous synchronization operation to update the second database, include instructions that when executed by the computer cause the computer to perform operations comprising, (Covered in claim 1): determining whether the structure of the first database has been updated since the previous synchronization operation (Huang Col 13, lines 50-60) (Huang Col 14, lines 20-30).

27. In claim 23, Huang-Herrod-Boothby teaches about a machine-readable medium of claim 22, wherein the instructions for performing the operation of receiving, from the server, one of the filtered data or a subset of the filtered data that has changed since the previous synchronization operation to update the second database, include instructions that when executed by the computer cause the computer to perform operations comprising (Covered in claim 1): comparing the first information with information stored on the handheld device that is indicative of the structure of

the first database when the previous synchronization operation was performed (Huang Col 13; lines 50-60) (Huang Col 14, lines 20-30).

23. In claim 24, Huang-Herrod-Boothby teaches about a machine-readable medium of claim 22, wherein the instructions for performing the operation of receiving, from the server, data extracted from the first database to update the second database, include instructions that when executed by the computer cause the computer to perform operations comprising: receiving, from the server, a first set of data extracted from the first database when the structure of the first database has been updated since the previous synchronization operation, the first set of data including data that has not changed in the second database since the previous synchronization operation was performed (Huang Col 10, lines 15-25) (Huang Col 13, lines 35-45) (Huang Col 13, lines 50-60). Steps involve when updating email from a Lotus Notes source.

24. In claim 25, Huang-Herrod-Boothby teaches about a machine-readable medium of claim 22, wherein the instructions for performing the operation of receiving, from the server, data extracted from the first database to update the second database, include instructions that when executed by the computer cause the computer to perform operations comprising: receiving, from the server, a second set of data extracted from the first database when the structure of the first database has not been updated since the previous synchronization operation, the second set of data not including data that has not changed in the second database since the previous synchronization operation was performed (Huang Col 10, lines 15-25) (Huang Col 13, lines 50-60). Steps involve when updating an address book application.

25. In claim 26, Huang-Herrod-Boothby teaches about a machine-readable medium of claim 21, wherein the plurality of instructions further comprises instructions that when executed by the computer cause the computer to perform operations comprising: determining whether the application has been updated since the previous synchronization operation (Huang Col 13, lines 50-60).

26. In claim 28, Huang-Herrod-Boothby teaches about a machine-readable medium of claim 21, wherein the instructions for performing the operation of sending, to the server, information of transactions performed on the second database, include instructions that when executed by the computer cause the computer to perform operations comprising: receiving, from the server, an identifier of information of a last transaction received by the server (Huang Col 14, lines 20-30); and sending, to the server, transaction information that includes an identifier for each transaction "update history" made after the last transaction received by the server (Huang Col 14, lines 20-30).

27. In claim 29, Huang-Herrod-Boothby teaches about a machine-readable medium of claim 28, wherein the instructions for sending to the server information of transactions performed on the second database, include instructions that when executed by the computer cause the computer to perform operations comprising: receiving, from the server, error information when the server detects a transaction error (Huang Col 14, lines 35-40); providing an indication of the error

information to a user (Huang Col 14, lines 1218); and receiving input from the user to process the transaction error (Huang Col 14, lines 12-18).

28. In claim 31, Huang-Herrod-Boothby teaches about a handheld device, comprising (Fig 2): a local database (Fig 2, 202); a user interface (key pad on handheld) coupled to the local database (Huang Col 1, lines 50-60); a transaction recorder coupled to the local database, wherein the transaction recorder to record information related to changes made to the local database by a user of the handheld device via the user interface and to provide the recorded information to a server during a synchronization operation (Huang Col 14, lines 20-30); a metadata importer (sync logic combine with transformation code) coupled to the user interface, wherein the metadata importer to receive metadata from the server during the synchronization operation, the metadata including information for updating the user interface (the display)(Huang Col 13, lines 4050); and a data importer coupled to the local database, wherein the data importer to receive data provided by the server during the synchronization operation, the data being a subset of data extracted from a main database based on visibility rules and filter, the subset representing a part of the, extracted data that has changed since a previous synchronization operation by the server (Covered in claims 1) (Huang Col 13, lines 35-50).

29. In claim 33, Huang-Herrod-Boothby teaches about a handheld device of claim 31, wherein the data importer further to determine whether a structure of the main database has been changed since previous synchronization operation (Huang Col 13, lines 50-60).

Art Unit: 2144

30. In claim 34, Huang-Herrod-Boothby teaches about a handheld device of claim 33, wherein the data importer to receive an identifier corresponding to the structure of the main database and compare the received identifier with a stored identifier corresponding to the structure of the main database when the previous synchronization operation was performed (Huang Col 13, lines 40-45) (Huang Col 13, lines 50-60).

31. In claim 35, Huang-Herrod-Boothby teaches about a handheld device of claim 33, wherein the data importer to receive a first set of data extracted from the main database by the server when the structure of the main database has changed since the previous synchronization operation, the first set of data including data that has not changed in the local database since the previous synchronization operation was performed (Huang Col 10, lines 15-25) (Huang Col 13, lines 35-45) (Huang Col 13, lines 50-60). Steps involve when updating email from a Lotus Notes source.

32. In claim 36, Huang-Herrod-Boothby teaches about a handheld device of claim 33, wherein the data importer to receive a second set of data extracted from the main database by the server when the structure of the main database has not changed since the previous synchronization operation, the second set of data omitting data that has not changed in the local database since the previous synchronization operation was performed (Huang Col 10, lines 15-25) (Huang Col 13, lines 50-60).. Steps involve when updating an address book application.

33. In claim 37, Huang-Herrod-Boothby teaches about a 'handheld device of claim 31, wherein the metadata importer to determine whether the user interface has been updated since the previous synchronization operation (Huang Col 13, lines 50-60).

34. In claim 38, Huang-Herrod-Boothby, teaches about a handheld device of claim 37, wherein the metadata importer to receive version information of a most currently available user interface and to compare the received version information with version information corresponding to the user interface included in the handheld device (Huang Col 13, lines 50-60) (Huang Col 14, lines 20-30).

35. In claim 39, Huang combined with Boothby, teaches about a handheld device of claim 31, wherein the transaction recorder to receive from the server an identifier of a last transaction recorded by the transaction for which transaction information was received by the server from the handheld device and to send to the server transaction information that includes an identifier for each transaction made after the last transaction (Huang Col 13, lines 50-60) (Huang Col 14, lines 20-30).

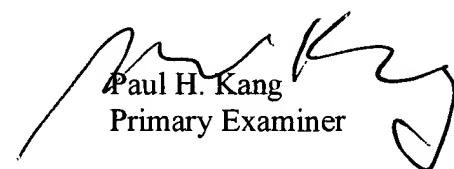
36. In claim 40, Huang-Herrod-Boothby teaches about a handheld device of claim 39, wherein the transaction recorder to receive from the server error information when the server detects a transaction error, to provide an indication of the error information to a user, and to receive input from the user to process the transaction error (Huang Col 14, lines 12-25) (Huang Col 14, lines 35-40).

Conclusion

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul H. Kang whose telephone number is (571) 272-3882. The examiner can normally be reached on 9 hour flex. First Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Paul H. Kang
Primary Examiner